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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,736	09/29/2003	Toshiki Taguchi	Q77754	6771

23373 7590 04/28/2005

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EXAMINER	
KLEMANSKI, HELENE G	
ART UNIT	**PAPER NUMBER**
1755	

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/671,736	TAGUCHI ET AL.	
	Examiner	Art Unit	
	Helene Klemanski	1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-19 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

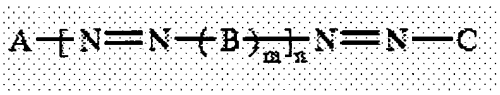
DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

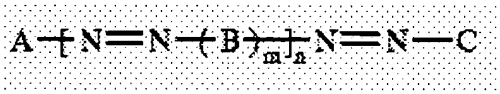
> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a black ink for inkjet recording comprising a dye of the formula



wherein A, B and C each independently represent an aromatic or heterocyclic group, which are substitutes or unsubstituted; m is 1 or 2 and n is an integer of 0 or more, dissolved and/or dispersed in an aqueous medium wherein the dye has the properties as claimed by applicants, does not reasonably provide enablement for a black ink for inkjet recording comprising a dye dissolved and/or dispersed in an aqueous medium wherein the dye has the properties as claimed by applicants. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

The claims recite a black ink for inkjet recording comprising a dye dissolved and/or dispersed in an aqueous medium wherein the dye has the properties as claimed by applicants. This encompasses any dye that has those properties. However, the specification only teaches the use of a dye of the formula



wherein A, B and C each independently represent an aromatic or heterocyclic group, which are substitutes or unsubstituted; m is 1 or 2 and n is an integer of 0 or more. Such a limited disclosure does not support the breadth of the instant claims. The examiner suggests the incorporation of claim 12 into claims 1-4 to overcome this rejection.

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 3 and 6-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 3, 6, 8 and 10, the phrase "JIS code 2223" is considered vague and indefinite since it unclear what this code is or what it does. The examiner can find no disclosure of the particulars of this code in the specification. Please clarify.

In claim 14, the phrase "which comprises a dye of the formula (1)" I considered confusing since it is unclear as to which dye in claim 2 applicants are indicating is of the formula (1). The examiner assumed applicants intended that the first dye in claim 2 is to have this formula and examined as such. Please clarify.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-7, 10-13 and 16-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of copending Application No. 10/809,550 (US 2004/0187738). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4-8, 10 and 11 of copending Application No. 10/714,945 (US 2004/0154496). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3-7, 10-13 and 16-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 6 and 7 of copending Application No. 10/808,464 (US 2004/0187736). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application overlap said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 10/671,729 (US 2004/0070654). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1, 3-7, 10-13 and 16-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, 4, 6 and 7 of copending Application No. 10/806,453 (US 2004/0187734). Although the conflicting claims are not identical, they are not patentably distinct from

each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of copending Application No. 10/645,797 (US 2004/053988). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are generic to said patent claims and would be obvious thereby.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In the above copending applications, it is the examiner's position that it would have been obvious to one having ordinary skill in the art that: (1) the dye would have a λmax of from 500-700 nm; (2) a half value width of 100 nm or more in an absorption spectrum of a dilute solution normalized to an absorbance of 1.0 and (3) a forced fading rate constant k_{vis} of 5.0×10^{-2} [$hour^{-1}$] or less since the dye of copending applications are the same structure as those claimed by applicants.

Furthermore, in the above copending applications, it is the examiner's position that it would have been obvious to one having ordinary skill in the art that black ink would have a transition metal ion content of 0.1 mmol/l or less since the ink of the

copending applications are filtered to remove impurities (see examples) and are the same composition as the inks as claimed by applicants.

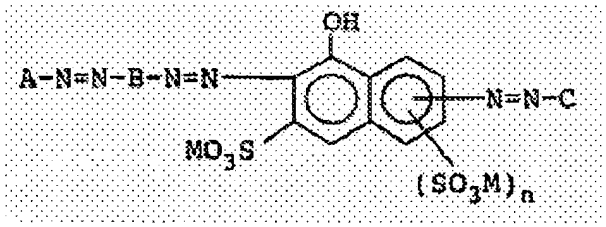
Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

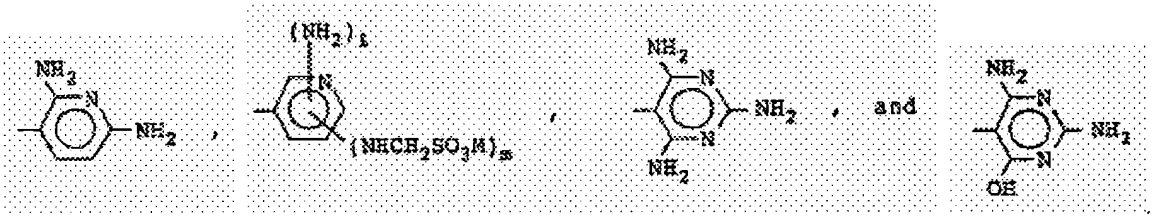
> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3-7, 10-13 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0422668.

EP 0422668 teach a recording liquid comprising a solvent and at least one dye of the formula



wherein A represents a substituted or unsubstituted phenyl or naphthyl group; B represents a substituted or unsubstituted phenylene or naphthalene group; C represents an organic group selected from the groups consisting of



wherein l is a number of 0 or 1 and m is a number of 1 or 2, provided that l+m=2; M represents an alkali metal, ammonium group or an organic amine salt and n is a number of 0 or 1. EP 0422668 further teaches that the dye is filtered several times before the final recording liquid is prepared (see specifically example 1, page 18, lines 15-47). See page 2, lines 31-47, page 4, lines 20-36, page 6, lines 20-25, dye formula (a), dye formula (g), dye formula (l), examples 1, 7 and 12 and claims 1 and 5. The black ink as taught by EP 0422668 appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the transition metal ion content of 0.1 mmol/l or less. However, this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain a black ink with applicants claimed transition metal content since the ink of EP 0422668 is filtered to remove impurities (see examples) and is the same composition as the ink as claimed by applicants.

7. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (US 2004/0053988).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Taguchi et al. teach an ink set comprising a plurality of ink different in hues wherein the plurality of inks includes a black ink containing a coloring agent that is a dye having a λmax of from 500-700 nm; a half value width of 100 nm or more in an absorption spectrum of a dilute solution normalized to an absorbance of 1.0; and a forced fading rate constant k_{vis} of 5.0×10^{-2} [$hour^{-1}$] or less. The dye is of the formula

wherein A, B and C each independently represents an aromatic group which may be substituted, or a heterocyclic group which may be substituted; m is an integer of 1 or 2; n is an integer of 0 or more, with the proviso that at least one of A, B and C is a heterocyclic group that may be substituted. The black ink optionally contains another dye having a λmax of 350-500 nm. Taguchi et al. further teach that coarse particles can be removed by known methods such as centrifugation and microfiltration. See paras. 0010-0015, paras. 0036-0045, paras. 0093-0096, Tables 1-6, paras. 0115-0117, paras. 0358-0359, example 1, Table A and claims 1-4. The black ink as taught by Taguchi et al. appears to anticipate the present claims.

The only limitation in the claims not found by the examiner is the transition metal ion content of 0.1 mmol/l or less. However, this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain a black ink with applicants claimed transition metal content since the ink of Taguchi et al. is filtered to remove impurities (see examples) and is the same composition as the ink as claimed by applicants.

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Conclusion

The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Helene Klemanski
Primary Examiner
Art Unit 1755

HK
April 25, 2005